

IN THE CLAIMS:

Please cancel claims 26 and 29-30, without prejudice.

1. 1. (Currently Amended) A fuel for a direct methanol fuel cell comprising:
2. methanol, and
3. ~~an effective amount of an additive that~~ an additive which is a fuel precursor in an
4. effective amount such that said additive undergoes a reaction with water to produce small
5. molecules that are easily electro oxidized.

1. 2. (Original) A fuel for a direct methanol fuel cell as in claim 1 wherein the additive is dimethyloxymethane.

1. 3. (Original) A fuel for a direct methanol fuel cell as in claim 2, wherein the fuel
2. comprises about 20 mole percent dimethyloxymethane.

1. 4. (Original) A fuel for a direct methanol fuel cell as in claim 3 further comprising
2. less than about .1% by weight of an indicating dye.

1. 5. (Original) A fuel for a direct methanol fuel cell as in claim 4 where the indicating
2. dye includes sulfonated activated carbon particles.

1. 6. (Original) A fuel for a direct methanol fuel cell as in claim 1 wherein the additive is methylorthoformate.

1. 7. (Original) A fuel for a direct methanol fuel cell as in claim 6, wherein the fuel
2. comprises about 10 mole percent methylorthoformate.

1 8. (Original) A fuel for a direct methanol fuel cell as in claim 7 further comprising
2 less than about .1% by weight of an indicating dye.

1 9. (Original) A fuel for a direct methanol fuel cell as in claim 8 where the indicating
2 dye includes sulfonated activated carbon particles.

1 10. (Original) A fuel for a direct methanol fuel cell as in claim 1 wherein the additive
2 is tetramethylorthocarbonate.

1 11. (Original) A fuel for a direct methanol fuel cell as in claim 10, wherein the fuel
2 comprises about 10 mole percent tetramethylorthocarbonate.

1 12. (Original) A fuel for a direct methanol fuel cell as in claim 11 further comprising
2 less than about .1% by weight of an indicating dye.

1 13. (Original) A fuel for a direct methanol fuel cell as in claim 12 where the indicat-
2 ing dye includes sulfonated activated carbon particles.

1 14. (Original) A fuel for a direct methanol fuel cell as in claim 1 wherein the addi-
2 tive is trimethylborate.

1 15. (Original) A fuel for a direct methanol fuel cell as in claim 14, wherein the fuel
2 comprises about 7 mole percent trimethylborate.

1 16. (Original) A fuel for a direct methanol fuel cell as in claim 15 further comprising
2 less than about .1% by weight of an indicating dye.

1 17. (Original) A fuel for a direct methanol fuel cell as in claim 16 where the indicat-
2 ing dye includes sulfonated activated carbon particles.

1 18. (Original) A fuel for a direct methanol fuel cell as in claim 1 wherein the additive is tetramethylorthosilicate.

1 19. (Original) A fuel for a direct methanol fuel cell as in claim 18, wherein the fuel
2 comprises about 5 mole percent tetramethylorthosilicate.

1 20. (Original) A fuel for a direct methanol fuel cell as in claim 19 further comprising
2 less than about .1% by weight of an indicating dye.

1 21. (Original) A fuel for a direct methanol fuel cell as in claim 20 where the indicating dye includes sulfonated activated carbon particles.

1 22. (Currently Amended) A fuel for a direct methanol fuel cell comprising:
2 methanol; and
3 at least one additive that is a fuel precursor in an effective amount such that said additive undergoes a reaction with water to produce small molecules that are easily electro oxidized selected from the group consisting of: dimethyloxymethane, methylorthoformate, tetramethyl orthocarbonate, trimethyl borate, and tetramethyl orthosilicate.

1 23. (Original) A fuel for a direct methanol fuel cell as in claim 22 further comprising
2 less than about .1% by weight of an indicating dye.

1 24. (Currently Amended) ~~A fuel for a direct methanol fuel cell as in claim 23 where~~
2 A fuel for a direct methanol fuel cell comprising:
3 methanol; and
4 an additive which is a fuel precursor in an effective amount such that said additive undergoes a reaction with water to produce small molecules that are easily electro oxidized selected from the group consisting of: dimethyloxymethane, methylorthoformate, tetramethyl orthocarbonate, trimethyl borate, and tetramethyl ortho-

8 | silicate and about 0.1% by weight of an indicating dye, and the indicating dye in-
9 | cludes sulfonated activated carbon particles.

1 | 25. (Original) A fuel additive for a direct methanol fuel cell consisting essentially of
2 | at least one additive that undergoes a rapid reaction with water to produce small mole-
3 | cules that are easily electro oxidized selected from the group consisting of: dimethyloxy-
4 | methane, methylorthoformate, tetramethyl orthocarbonate, trimethyl borate, and tetrame-
5 | thyl orthosilicate; and an effective amount of an indicating dye.

1 | 26. (Cancelled)

1 | 27. (Currently Amended) A fuel for a direct methanol fuel cell comprising:
2 | methanol;
3 | an effective amount of an additive which is a fuel precursor in an effective
4 | amount such that said additive that undergoes a reaction with water to produce small
5 | molecules that are easily electro oxidized; and
6 | an effective amount of a metal hydride.

1 | 28. (Currently Amended) A fuel for a direct methanol fuel cell comprising:
2 | methanol; and
3 | an effective amount of at least one additive one or more additives including an
4 | additive which is a fuel precursor in an effective amount such that said additive that un-
5 | dergoes a reaction with water to produce small molecules that are easily electro oxidized
6 | selected from the group consisting of: dimethyloxymethane, methylorthoformate,
7 | tetramethyl orthocarbonate, trimethyl borate, and tetramethyl orthosilicate; and
8 | an effective amount of a metal hydride.

1 | 29-30. (Cancelled)

1 31. (Currently Amended) The method of preparing a fuel mixture for a direct metha-
2 nol fuel cell comprising the steps of:

3 a) providing a supply of concentrated methanol; and

4 b) adding an effective amount of at least one additive that an additive

5 which is a fuel precursor in an effective amount such that said additive

6 undergoes a reaction with water to produce small molecules that are easily

7 electro oxidized selected from the group consisting of: dimethyloxymethane, methylorthoformate, tetramethyl orthocarbonate, trimethyl borate,

8 and tetramethyl orthosilicate.

9

1 32. (Currently Amended) The method of preparing a fuel mixture for a direct metha-
2 | nol fuel cell as in claim 30 31 further comprising the step of :

3 e) providing a supply of concentrated methanol; and adding an effective amount
4 of at least one metal hydride selected from the group consisting of LiAlH₄,
5 NaBH₄, LiBH₄, (CH₃)₂NHBH₃, NaAlH₄, B₂H₆, NaCnBH₃, CaH₂, LiH, NaH, KH
6 and sodium bis (2-methoxyethoxy) dihydridaluminate.